

Message

From: Tadesse, Haile [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=114D2E5F74BF4C958EFF767E15479552-TADESSE, HA]
Sent: 6/19/2019 6:41:03 PM
To: Washington, John [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=fdc3e8ce9f1d45c4894881ff420ca104-Washington, John]; Lindstrom, Andrew [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=04bf7cf26aa44ce29763fbc1c1b2338e-Lindstrom, Andrew]
CC: Pilant, Drew [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=c9669a68dabb4704bdd7c2eb85f998b2-Pilant, Drew]; Strynar, Mark [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=5a9910d5b38e471497bd875fd329a20a-Strynar, Mark]; McCord, James [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=McCord, James]
Subject: RE: Odd and even difference map

Thanks John,

Ex. 5 Deliberative Process (DP)

Best,

Haile

From: Washington, John
Sent: Wednesday, June 19, 2019 2:31 PM
To: Tadesse, Haile <tadesse.haile@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>
Cc: Pilant, Drew <Pilant.Drew@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>; McCord, James <mccord.james@epa.gov>
Subject: RE: Odd and even difference map

Hi Haile and all,

Ex. 5 Deliberative Process (DP)

Thanks!
John

From: Tadesse, Haile
Sent: Wednesday, June 19, 2019 11:11 AM
To: Washington, John <Washington.John@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>
Cc: Pilant, Drew <Pilant.Drew@epa.gov>
Subject: RE: Odd and even difference map

Good morning John,

I have attached the maps for your review. **Ex. 5 Deliberative Process (DP)**

Best,

Haile

From: Washington, John
Sent: Monday, June 17, 2019 3:23 PM
To: Tadesse, Haile <tadesse.haile@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>
Cc: Pilant, Drew <Pilant.Drew@epa.gov>
Subject: RE: Odd and even difference map

Hi Haile,

OK, a couple of things.

- 1)
- 2)
- 3)
- 4)
- 5)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

We should talk when Andy Lindstrom and Drew are present. This is a very good start, but it would be good to try to give you perspective so you can focus on the target a little more easily.

John

From: Tadesse, Haile
Sent: Monday, June 17, 2019 1:53 PM
To: Washington, John <Washington.John@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>
Cc: Pilant, Drew <Pilant.Drew@epa.gov>
Subject: Odd and even difference map

Hi John,

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

The following information is from ArcGIS help.

“Controlling the influence with the Power parameter

IDW relies mainly on the inverse of the distance raised to a mathematical power. The Power parameter lets you control the significance of known points on the interpolated values based on their distance from the output point. It is a positive, real number, and its default value is 2.

By defining a higher power value, more emphasis can be put on the nearest points. Thus, nearby data will have the most influence, and the surface will have more detail (be less smooth). As the power increases, the interpolated values begin to approach the value of the nearest sample point. Specifying a lower value for power will give more influence to surrounding points that are farther away, resulting in a smoother surface.

Since the IDW formula is not linked to any real physical process, there is no way to determine that a particular power value is too large. As a general guideline, a power of 30 would be considered extremely large and thus of questionable use. Also keep in mind that if the distances or the power value are large, the results may be incorrect.

An optimal value for the power can be considered to be where the minimum mean absolute error is at its lowest. The ArcGIS Geostatistical Analyst extension provides a way to investigate this.”

<https://mgimond.github.io/Spatial/spatial-interpolation.html>

From: Washington, John

Sent: Monday, June 17, 2019 7:28 AM

To: Tadesse, Haile <tadesse.haile@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>

Cc: Pilant, Drew <Pilant.Drew@epa.gov>

Subject: RE: NJ_PFOA MAP

PS: The distance I suggest for an IDW interpolation is between the stack and the sample points, not between one point and another point. If you are interpolating on distance between points, maybe your inverse-distance is the better option.

From: Washington, John

Sent: Monday, June 17, 2019 7:11 AM

To: Tadesse, Haile <tadesse.haile@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>

Cc: Pilant, Drew <Pilant.Drew@epa.gov>

Subject: RE: NJ_PFOA MAP

Hi Haile,

Ex. 5 Deliberative Process (DP)

John

From: Tadesse, Haile
Sent: Friday, June 14, 2019 10:42 AM
To: Washington, John <Washington.John@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>
Cc: Pilant, Drew <Pilant.Drew@epa.gov>
Subject: RE: NJ_PFOA MAP

Hi Dr. John,

I have the data for the 24 soil samples. If I need any additional information, I will let you know. Do you have a study area map? The interpolation depends on the polygon (mask) selected.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Best,

Haile

From: Washington, John
Sent: Friday, June 14, 2019 9:27 AM
To: Tadesse, Haile <tadesse.haile@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>
Cc: Pilant, Drew <Pilant.Drew@epa.gov>
Subject: Re: NJ_PFOA MAP

Haile,

If you have most my data, the three most interesting things to plot right now are soil values for:

- 1) Sum of nine ClPFPECAAs;
- 2) plot of the 0,1 ClPFPECA congener;
- 3) And this value for the legacy compounds: $[(C9+C11+C13)-(C8+C10+C12)]$

If you don't have these values at hand, I can send Monday or maybe later today. (My work week was done yesterday, but I am killing time waiting for my wife right now.)

It will be worth exploring these and perhaps other variables for plant tissue in the future.

John

From: Tadesse, Haile
Sent: Friday, June 14, 2019 9:16:18 AM
To: Washington, John; Lindstrom, Andrew
Cc: Pilant, Drew
Subject: RE: NJ_PFOA MAP

Good morning Dr. John,

Yes. It is possible to do similar map and I hope you have more data.

Best,

Haile

From: Washington, John
Sent: Friday, June 14, 2019 9:13 AM
To: Tadesse, Haile <tadesse.haile@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>
Cc: Pilant, Drew <Pilant.Drew@epa.gov>
Subject: Re: NJ_PFOA MAP

Hi Haile,

I was swamped this week, so just a quick response for now. If I send more other variables to you to plot and maybe raster/contour, might you be able to do that quickly?

If so, I can plan to send you two or three variables to plot next week.

Nice job!

John

From: Tadesse, Haile
Sent: Monday, June 10, 2019 2:45:37 PM
To: Washington, John; Lindstrom, Andrew
Cc: Pilant, Drew
Subject: NJ_PFOA MAP

Good afternoon Dr. John and Andrew,

Ex. 5 Deliberative Process (DP)

If you have any comments , let me know.

Haile

From: Washington, John

Sent: Tuesday, May 28, 2019 9:12 AM

To: Pilant, Drew <Pilant.Drew@epa.gov>

Cc: Tadesse, Haile <tadesse.haile@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>

Subject: RE: new NJDEP data?

Hey Drew and Haile,

Is your ECOS demo prep proceeding well? I am back at work in case you have NJ-PFAS questions.

John

From: Pilant, Drew

Sent: Monday, May 13, 2019 11:37 AM

To: Washington, John <Washington.John@epa.gov>

Cc: Tadesse, Haile <tadesse.haile@epa.gov>

Subject: new NJDEP data?

Hi John,

Haile and I would like to talk to you. Tim Buckley suggested we demo a local PFAS mapping example with your NJDEP soil data. Tim also mentioned that you have a new set of calculations since you and I last worked on this some months ago. The demo is for the states ECOS on the OECA PFAS call 5/30 2 pm.

Can we meet and discuss this in the next few days?

Thanks,
Drew